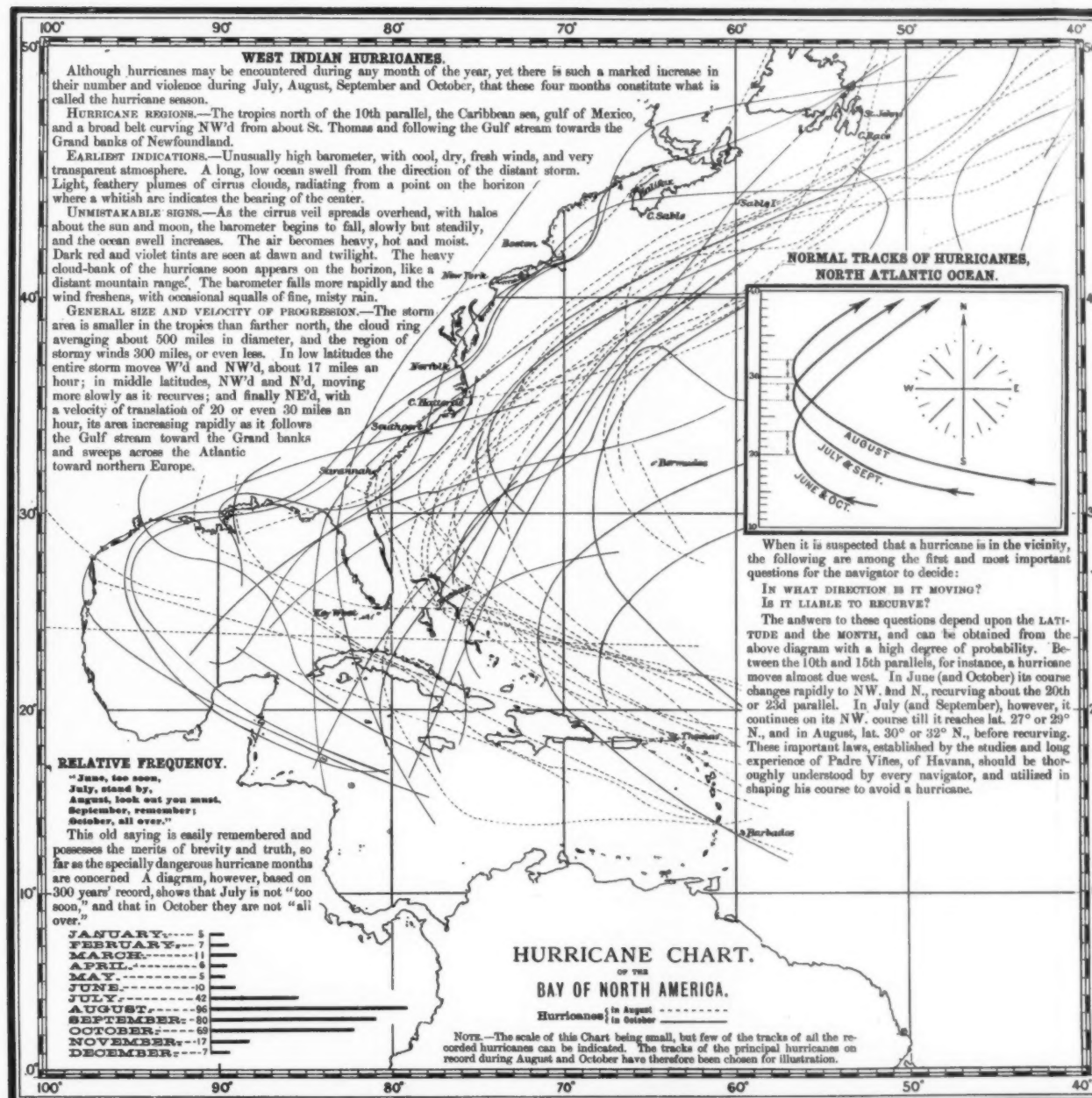


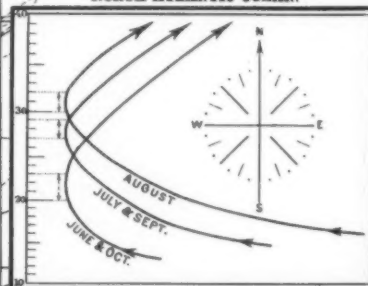
WEST INDIAN HURRICANES

From the Pilot Chart of the North Atlantic Ocean, May, 1889, with the addition of diagrams prepared in the Division of Marine Meteorology.

SUPPLEMENT
TO THE
AMERICAN METEOROLOGICAL JOURNAL
MAY, 1889.



NORMAL TRACKS OF HURRICANES, NORTH ATLANTIC OCEAN.



When it is suspected that a hurricane is in the vicinity, the following are among the first and most important questions for the navigator to decide:

IN WHAT DIRECTION IS IT MOVING?
IS IT LIABLE TO RECURVE?

The answers to these questions depend upon the LATITUDE and the MONTH, and can be obtained from the above diagram with a high degree of probability. Between the 10th and 15th parallels, for instance, a hurricane moves almost due west. In June (and October) its course changes rapidly to NW. and N., recurving about the 20th or 23d parallel. In July (and September), however, it continues on its NW. course till it reaches lat. 27° or 29° N., and in August, lat. 30° or 32° N., before recurving. These important laws, established by the studies and long experience of Padre Vines, of Havana, should be thoroughly understood by every navigator, and utilized in shaping his course to avoid a hurricane.

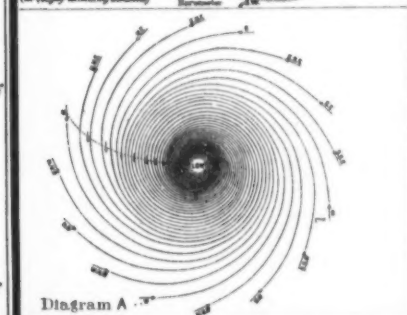
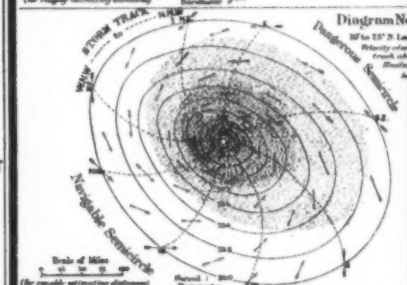
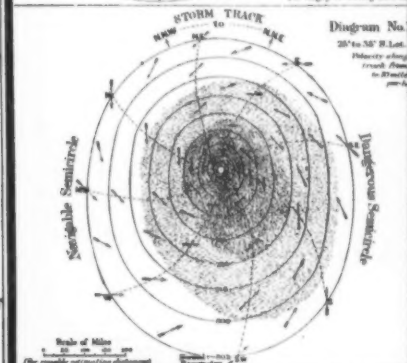
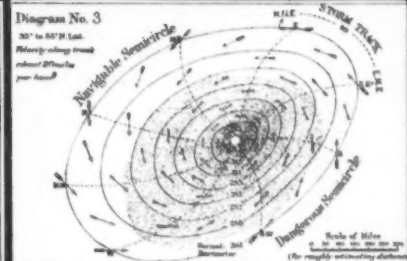


Diagram A.—Illustrating the circulation of wind toward and around the center of low barometer in a tropical cyclone, northern hemisphere. The dangerous winds occur in the inner whirls. In the southern hemisphere the circulation is reversed, as indicated by looking at the back of this diagram when held up to the light (reading E. for W., and W. for E.).

Diagrams Nos. 1, 2, 3.—For practical use in finding the position of a vessel relative to the center of a tropical cyclone, northern hemisphere, by means of the direction of the wind and fall of the barometer. The ovals are isobars. The dotted lines are constructed as indicated in diagram A. The shaded areas are the regions where it is especially dangerous for a vessel.

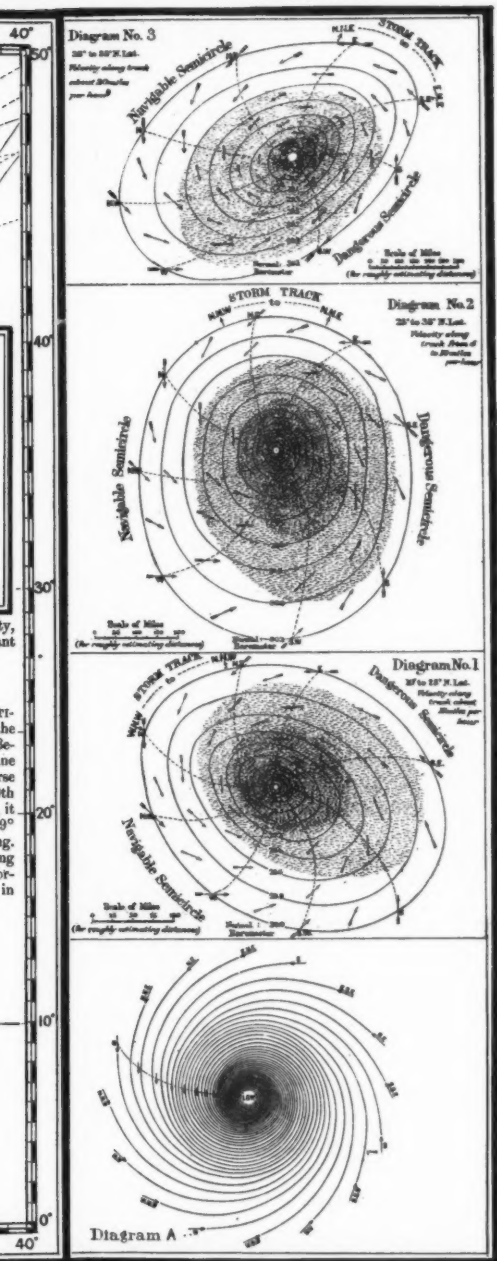
Approved: GEORGE L. DYER, Lieutenant, U. S. N., Hydrographer to Bureau of Navigation.

EVERETT HAYDEN, Division of Marine Meteorology.

the Pilot Chart of the North Atlantic Ocean, May, 1889, with the addition of diagrams prepared in the Division of Marine Meteorology.

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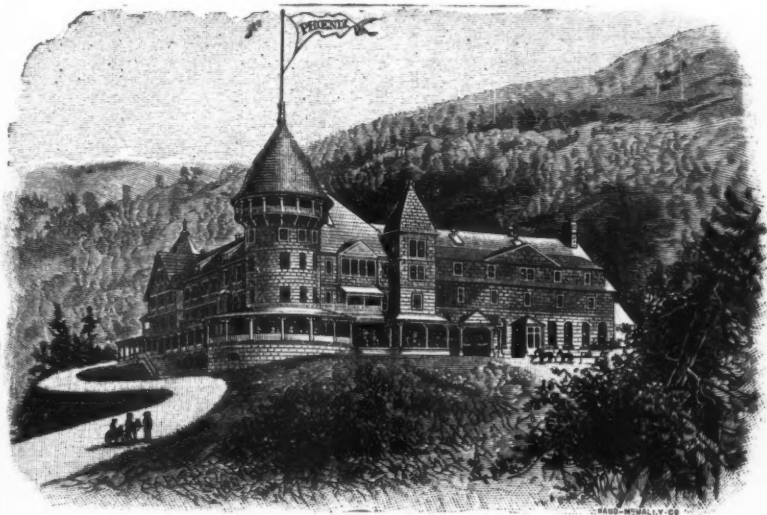
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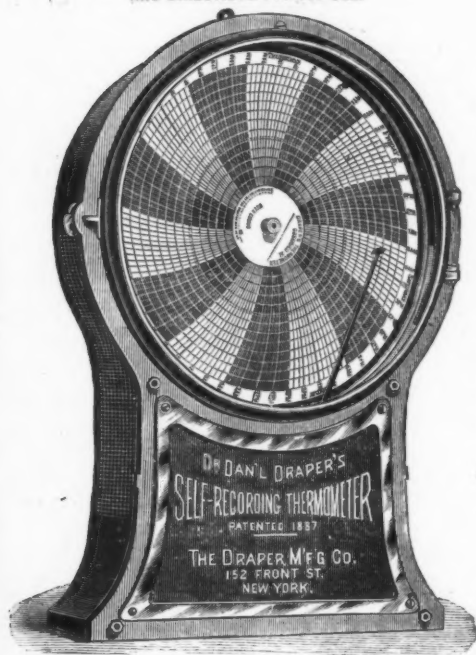
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